

**AMENDMENTS TO THE CLAIMS:**

Please replace the claims with the claims provided in the listing below wherein status, amendments, additions and cancellations are indicated.

RENUMBERED CLAIMS:

1 - 4. (Canceled)

<sup>2</sup>  
~~5.~~ (Previously Presented) The vane rotary expander according to any one of claims ~~7 to 10~~, wherein the expander is operated by means of an operating fluid expanding into a gas-liquid two phase from a liquid phase or a supercritical phase.

<sup>3</sup>  
~~6.~~ (Previously Presented) The vane rotary expander according to any one of claims ~~7 to 10~~, wherein the expander is operated by means of an operating fluid containing carbon dioxide as a main component.

<sup>1</sup> ~~7.~~ (Currently Amended) An expander having a plurality of operating chambers for expanding a high-pressure operating fluid and a shaft for obtaining a rotating power by ~~means of~~ expansion of the operating fluid in the operating chambers comprising:

a first discharge port which firstly communicates to ~~[[the]]~~ an operating chamber ~~involving in~~ of said operating chambers during a discharging process and a second discharge port which secondly communicates to the same operating chamber during said discharging processing;

a valve mechanism preventing the operating fluid from flowing back into the operating chamber being provided to the first discharge port; ~~[[and]]~~

a discharge chamber temporarily storing the operating fluid flowing out from the first and second discharge ports ~~wherein~~;

the expander being configured to produce a maximum volume pressure (Pc)